

IMPACTING PREMATURE MORTALITY AMONG PEOPLE WITH SERIOUS MENTAL ILLNESS

Shaping the Future of Mental Health™

Genesee County Community Mental Health

29 November 2010

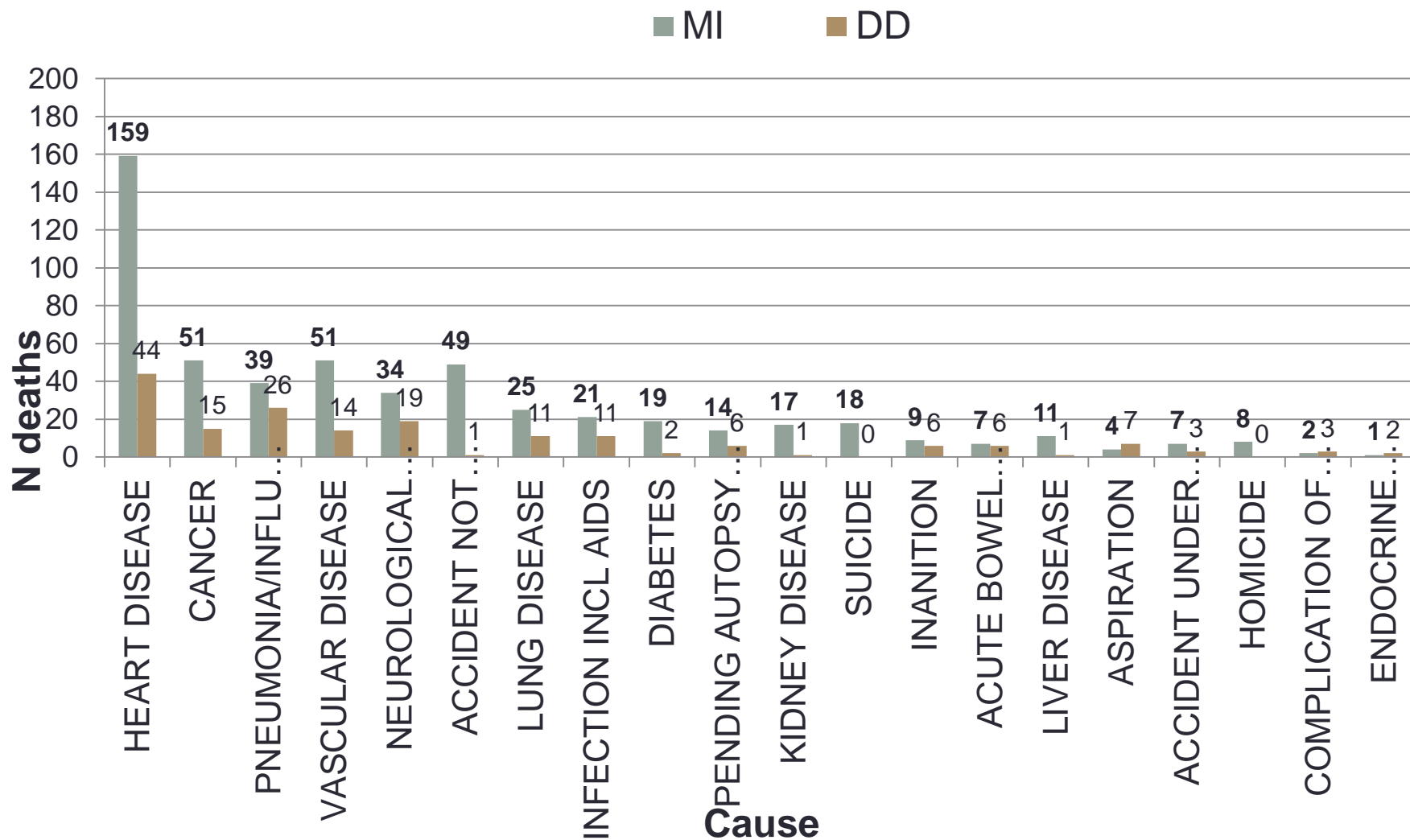
Problem/Impact

- People with serious mental illness (SMI) die an average of 25-30 years earlier than individuals in the general population *(National Association of State Mental Health Program Directors Medical Directors Council, 2006)*.
- People with SMI are at risk of weight gain, obesity and the associated adverse outcomes due to sedentary lifestyles, poor diet, metabolic alterations related to psychiatric medications, and tobacco use.
- People with SMI have nearly twice the normal risk of dying from cardiovascular disease (CVD).

Problem/Impact (cont.)

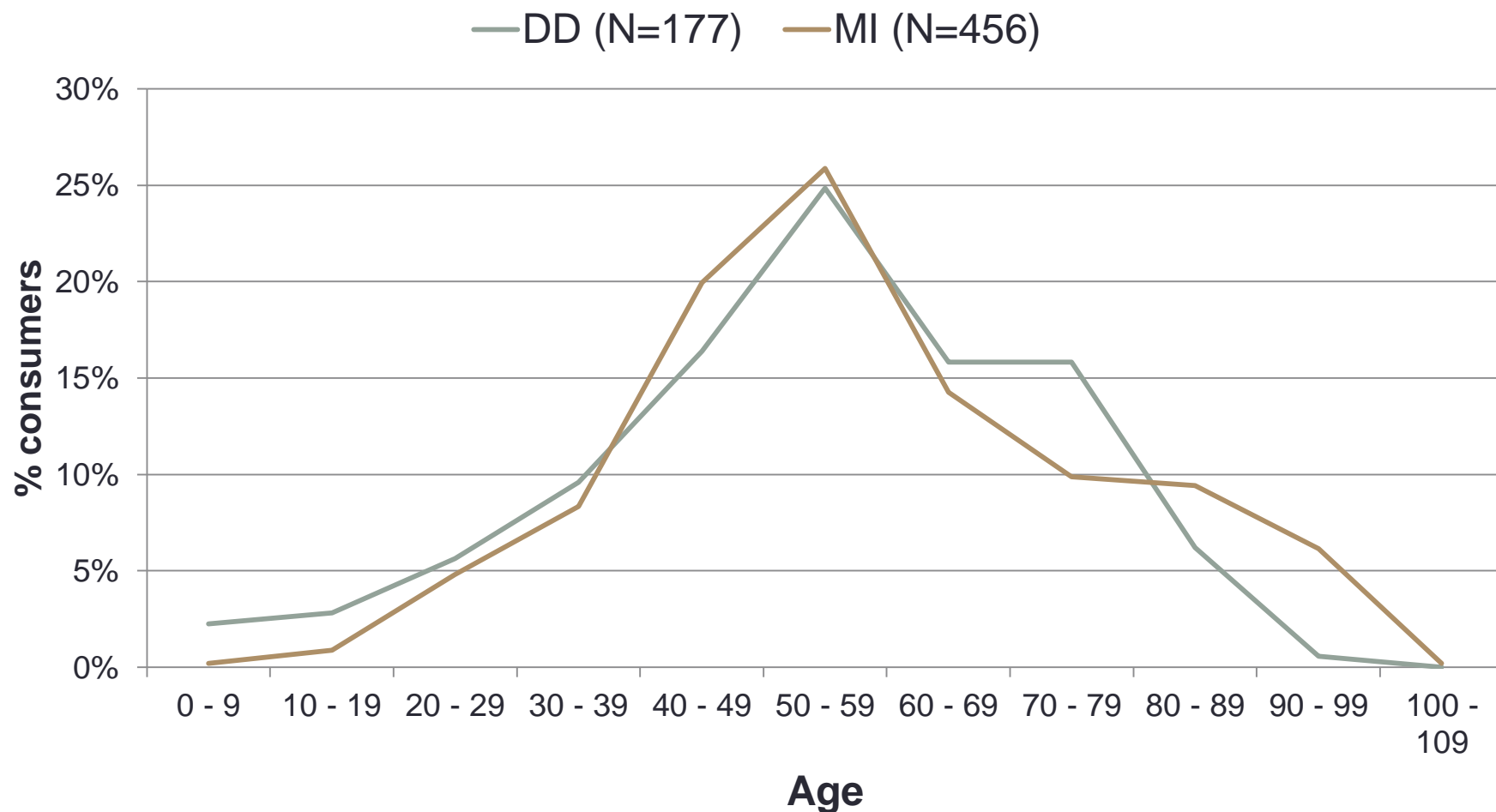
- Obesity is twice as prevalent among persons with SMI compared to persons without, placing them at risk for diabetes and CVD.
- CVD is the most common health consequence of obesity and the primary way obesity reduces life expectancy.
- Individuals with SMI are therefore dying primarily because of the **preventable medical conditions** that result from lifestyle risk factors, especially obesity.
- *Between October 2002 and September 2010, **159** GCCMH consumers with SMI died of CVD. This accounts for **30%** of all SMI deaths, and is the most common cause every year.*

GCCMH causes of death, DoD 10/1/02 - 9/13/09

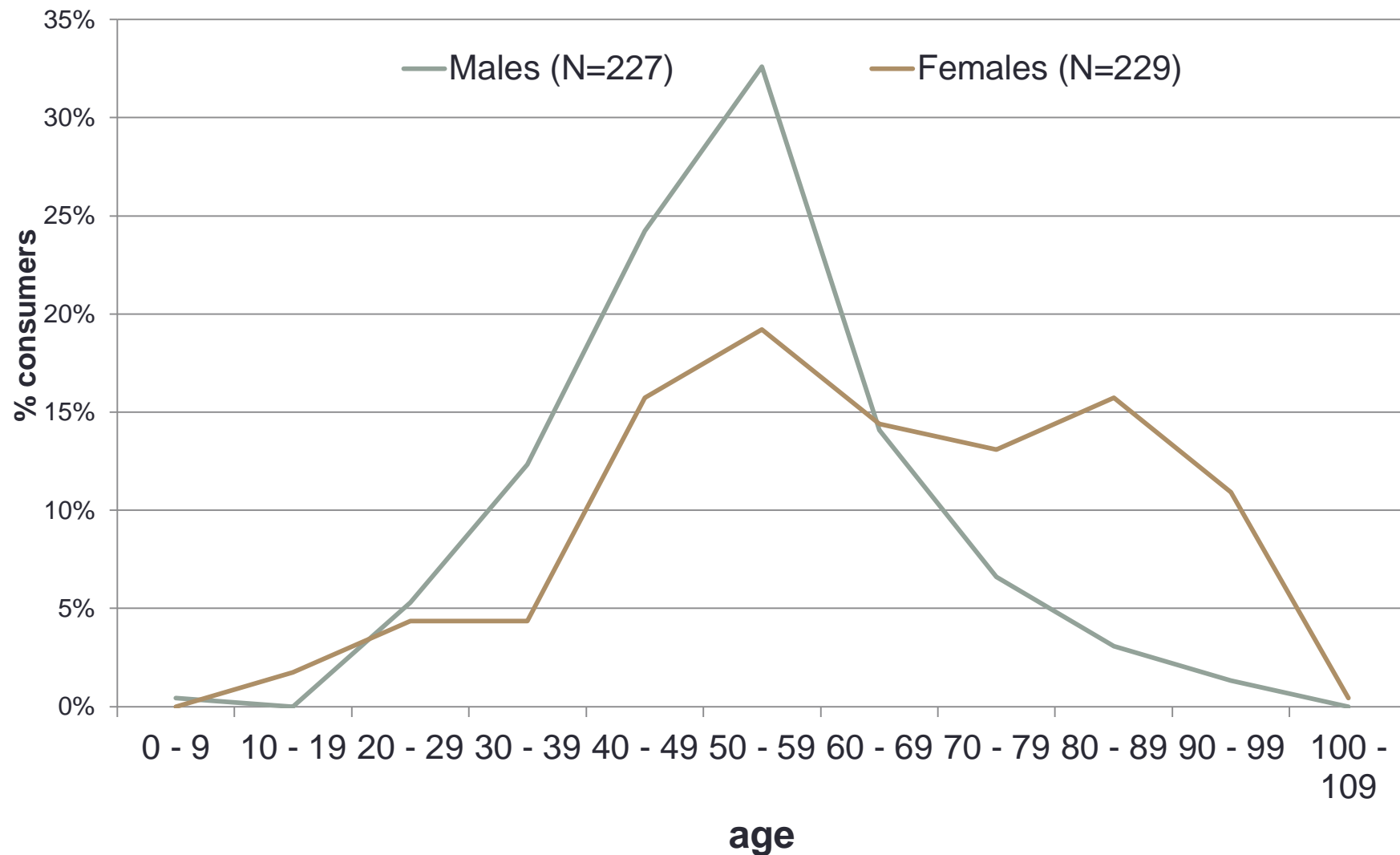


Frequency distribution: Age at death

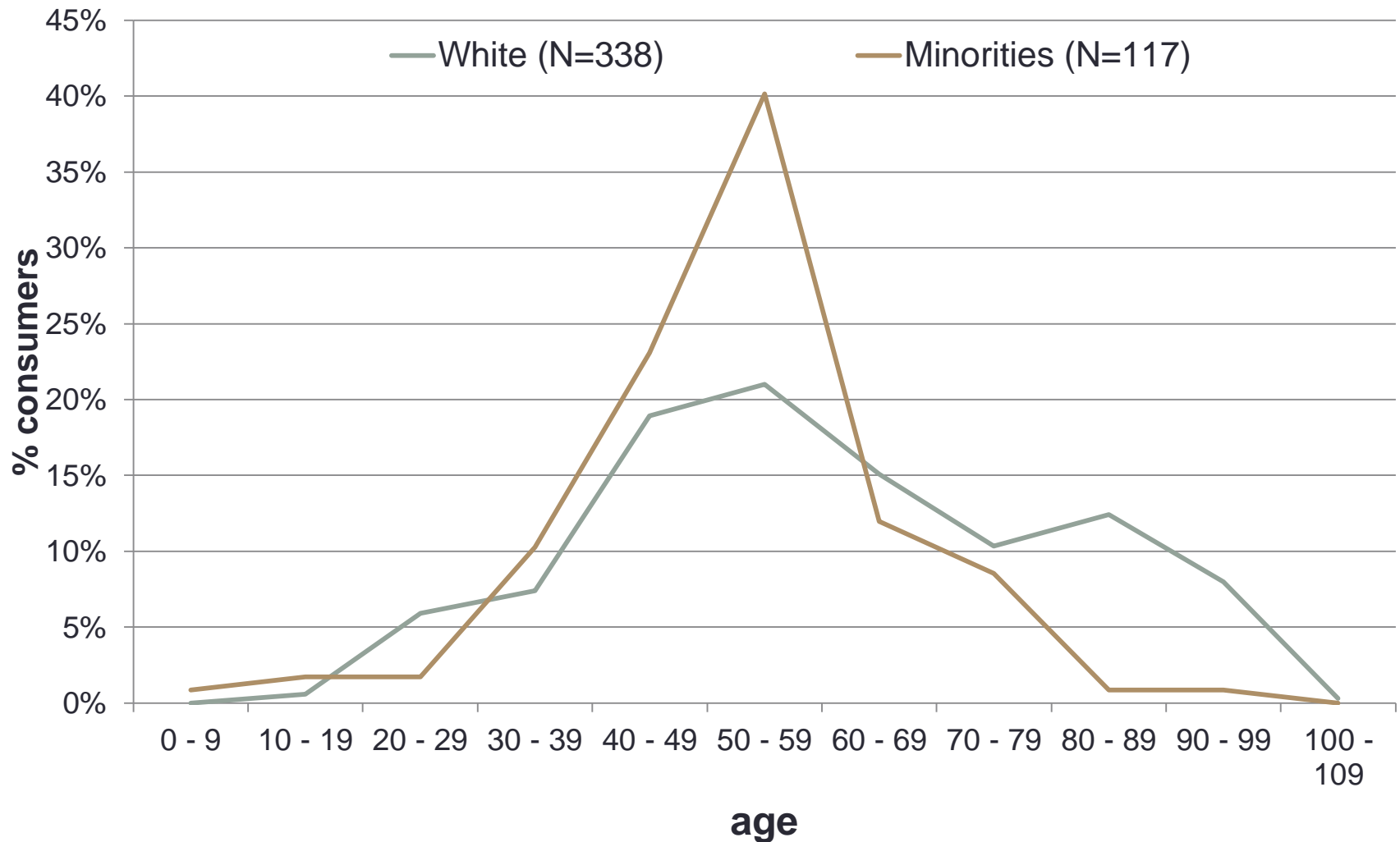
All active consumers, FY 2005-partial FY 2010



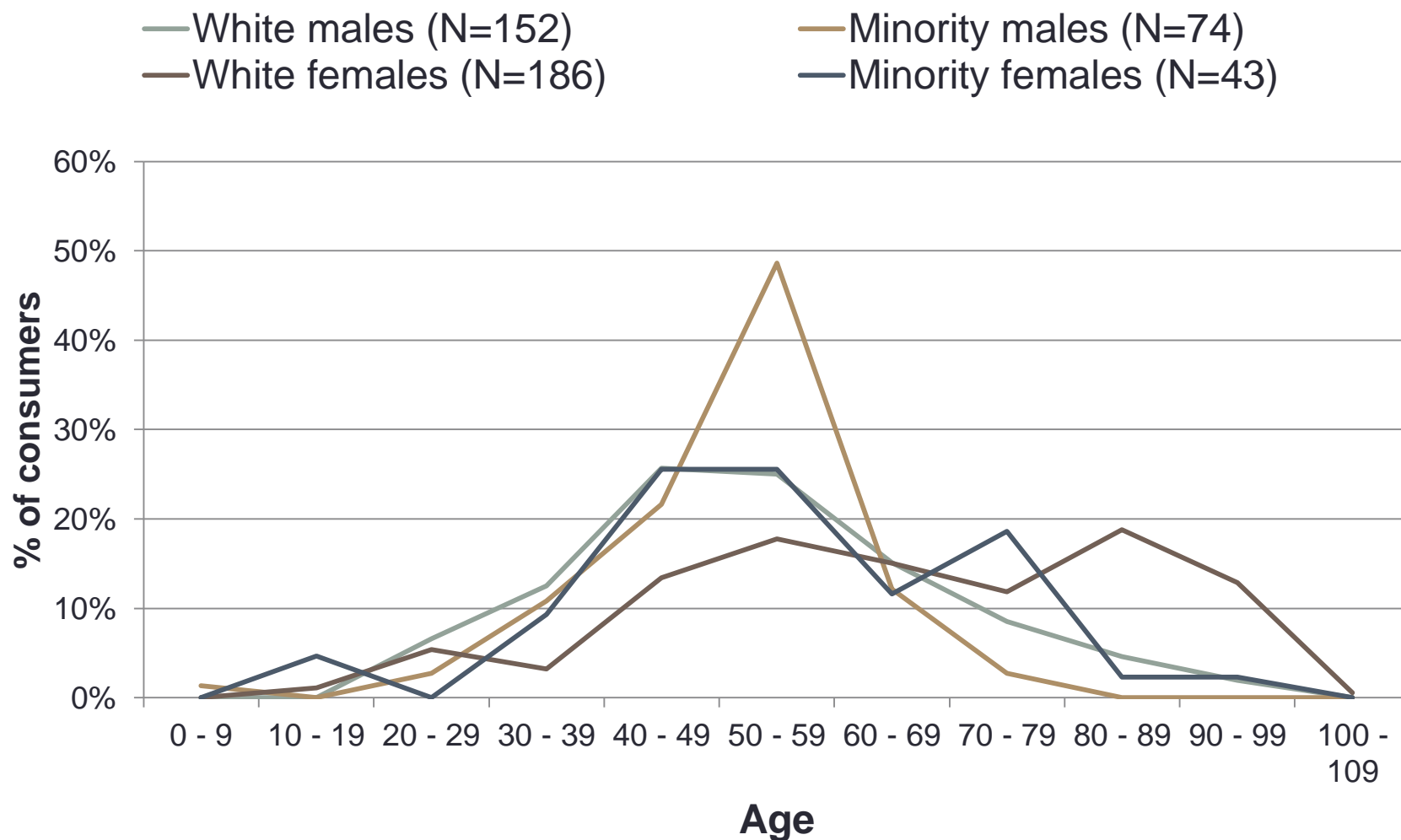
Age at death by gender (SMI only)



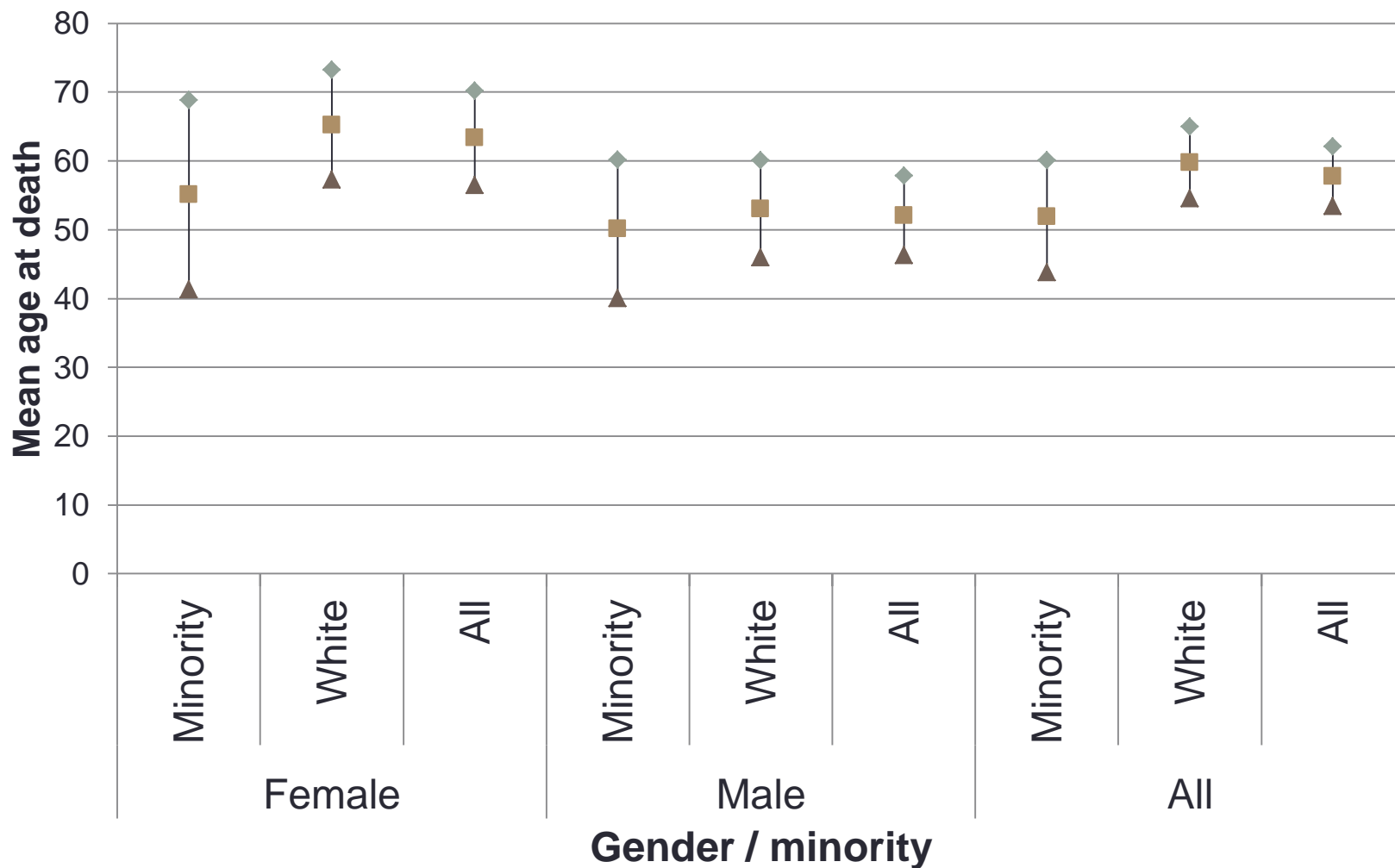
Age at death by race: white / minorities (SMI only)



Age at death by gender x race (SMI only)



Mean and 90% C.I. for age at death by gender and minority status for SMI consumers



Initiatives

- GCCMH launched **InSHAPE®** in August 2009, the only wellness promotion program of its type in Michigan. Two other Michigan MH agencies are in the planning stages.
 - Designed to lengthen life expectancy and improve the quality of life for persons with SMI through a combination of exercise, diet, coaching by a **Health Mentor** (certified personal trainer), and active use of healthcare services to reduce risk factors contributing to chronic disease and poor health status.
- Created “**wellness stations**” throughout our facilities across the county to provide health/wellness resources and educational materials, e.g., DVDs, BP machines, etc.
- Recruited **peer support specialists** to work alongside health mentors.
- Established the GCCMH **Community Garden Project**.
- Wrote a **five year strategic plan** that centers on promoting wellness and reducing morbidity and mortality.

InSHAPE Criteria for participation

- 18 years or older
- Have a serious mental illness: bipolar (most common), schizophrenia, major depression
- Currently seeing a CMH Case Manager*
- Have an identified health risk (high blood pressure, high cholesterol, overweight, diabetes, CVD, etc.) and associated high risk health behavior(s)
- Physician clearance to participate
- Acceptance without regard to ability to pay a nominal fee
- Willing to participate

*GCCMH criterion not a part of the NH model

Number of Participants with Chronic Health Conditions

***Many participants have multiple health conditions**

Overweight/obese 52

Smokers 33

Hypertension 32

Asthma 28

Diabetes 27

Angina 27

Allergies 24

High Cholesterol 26

Arthritis 22

Edema 15

Substance Abuse 12

Heart Palpitations 12

Osteoporosis 7

Heart Attack Hx 5

Hepatitis 5

COPD 4

Cerebral Palsy 3

Hyperthyroidism 3

Stroke hx 2

Cancer hx 2

Fibromyalgia 1

Rheumatic Fever 1

Rheumatoid Arthritis 1

Pilot results – New Hampshire

- The **Dartmouth Psychiatric Research Center** conducted an 18-month pilot study of InSHAPE's effects on the health of 98 participants served in original implementation site.
- **Findings:**
 - InSHAPE is effective in reducing disease risk factors, as well as improving the physical health and quality of life of persons with SMI.
 - InSHAPE participants had significantly increased their exercise level and reduced their average waist circumference (a marker for high risk).
 - Participants also reported significant improvements in mental and emotional functioning and a decrease in the severity of symptoms of schizophrenia.

Results – Genesee County

- As of September, InSHAPE participants (66) have achieved:
 - A combined weight loss of 116.7 pounds
 - A combined decrease of 259.1 cm in waist circumference
 - A combined decrease of 108.75 cm in hip circumference
 - A combined decrease of 39.5 in BMI points
- Average decreases in:
 - BMI: .79 points
 - Weight: 2.33 lbs
 - Waist: 2 in
 - Hip: 1 in
- Compliance overall: 75%

BUT.....

Results minus the 2 outliers*!

- As of September, InSHAPE participants (64) have achieved:
 - A combined weight loss of 179.7 pounds
 - A combined decrease of 272.4 cm in waist circumference
 - A combined decrease of 128.95 cm in hip circumference
 - A combined decrease of 39.50 in BMI points
- Average decreases:
 - BMI: 1.58 points
 - Weight: 9.8 lbs
 - Waist: 3.28 in
 - Hip: 2.92 in

* *One participant got a job as a chef and has unfortunately gained 40 lbs! Another has been extremely noncompliant and gained 35 lbs. Their outcomes dramatically skew the combined statistics on the prior slide.*

Collateral benefits of InSHAPE

- In addition to achieving recovery and tools for self-management of lifestyle choices, the program helps participants build **personal pathways** into the community (i.e., social inclusion and integration) and reduce the feeling of **stigma** associated with their mental illness.
- By recruiting local organizations as partners and utilizing accessible facilities/exercise venues in the community (e.g., fitness centers, parks, the Farmers Market), GCCMH is **breaking down barriers** in general for the people we serve.

Future developments

- Collaboration with the UM's Department of Psychiatry, School of Public Health, and the Prevention Research Center of Michigan to conduct a **comparative effectiveness study** of InSHAPE in Genesee County.
- This study is intended to build upon the Dartmouth Psychiatric Research Center's findings.
- When the RO1 grant is funded, we will hire ~7 more Mentors to serve 200+.
- Health indicators that are/will be measured include:
 - Weight
 - BMI
 - Waist Circumference
 - Hip Circumference
 - Blood Pressure
 - Cholesterol
 - HbA1c
 - Changes in use of Medication/Substance Use
 - Self-reported changes in mood and sleep patterns

InSHAPE financial sustainability

- Medicaid covers about 56% of Health Mentor costs through inclusion of Community Living Supports goals and objectives in the participant's IPOS.
- Also rely on support from General Fund, private trusts, and foundations.
- Considerable support from our research partner, the University of Michigan.

Suggested readings on InSHAPE

- Van Citters, A.D., Pratt, S I., Jue, K., Williams, G., Miller, P.T., Xie, H., Bartels, S.J. *A Pilot Evaluation of the InSHAPE Individualized Health Promotion Intervention for Adults with Mental Illness*. Community Mental Health Journal, published online 10 December 2009. Available at: <http://www.springerlink.com/content/t4852u6525gr3u62/>.
- Agency for Healthcare Research and Quality, US Department of Health and Human Services. *Exercise and Nutrition Program Helps Individuals with Serious Mental Illness Develop Healthier Lifestyles, Improve Fitness and Mental Well-Being*. Published 8 June 2009; updated 8 Aug 2010. Available at: <http://www.innovations.ahrq.gov/content.aspx?id=2444>.

Peer Support Specialists In Local EDs

- We introduced a Certified Peer Support Specialist in the Emergency Departments of both Flint hospitals (Hurley and McLaren).
- Our peers assist individuals in the midst of a psychiatric crisis through the unfamiliar and often frightening environment of the ED.
- The type of interventions our peers provide individuals during their wait in the ED are:
 - Provide support/assistance,
 - Make calls on an individual's behalf, or
 - Stay with the individual through the crisis screening process

Urban Garden

- We created a garden in conjunction with the MSU Extension Master Gardeners to teach consumers how to grow their own nutritious food.
- Groups of consumers/staff assist in tending to the needs of the garden in all phases of the project: planting, harvesting, and winterizing the soil for the next season.
- In August, our garden was featured in the Flint Garden Tour and we have been booked to be a tour site again next year.
- Our Health & Wellness Manager is enrolled in the Ruth Mott Foundation Introduction to Urban Gardening Train the Trainer course to assist in continuation of the project.